

TANNEN~~X~~HILL FURNACE
(Roupe Valley Iron Works)
(Tannenhill Historical State Park)
Birmingham Industrial District
12632 Confederate Parkway
Bucksville
Tuscaloosa County
Alabama

HAER No. AL-122

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Historic American Engineering Record
National Park Service
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P.O. Box 37127
Washington, DC 20013-7127

ADDENDUM TO
TANNEHILL FURNACE
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(Hillman's Forge)
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WRITTEN HISTORICAL & DESCRIPTIVE DATA

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ADDENDUM TO
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(Roupes Valley Iron Works)
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Location: 20 miles southwest of Birmingham, 14 miles south of Bessemer, 12632 Confederate Parkway near McCalla and Bucksville, Jefferson County, Bibb County & Tuscaloosa County, Alabama. The furnace complex is 55 acres and the state park 1,500 acres. Approaching from I 59-20, access is relatively convenient, though indirect. Upon exiting the interstate at the Bucksville Exit, the visitor travels south on old Tuscaloosa Road (Highway 216) to Tannehill Parkway. The park is also accessible from Eastern Valley Road (JC18). At the McCalla Exit off I 65-20, take Eastern Valley Road seven miles west to the park entrance.

Ownership: State of Alabama, governed by the Tannehill Furnace & Foundry Commission

Date of Construction: 1830 to 1865

Builder/Architect/Engineer: Multiple

Project Information: This report is based upon written documentation donated by the Birmingham Historical Society, reformatted to HABS/HAER guidelines.

Significance: The Tannehill Furnaces, the best example of a pre-Civil War and Civil War ironmaking plant in the District, contains evidence of slavery as an industrial labor force. This site represents ironmaking and ore mining methods used from colonial times to the Civil War. Tannehill's preserved buildings and equipment, opened for public interpretation, illustrate the technological history of these industries and the changing methods of providing power and moving materials. The site also provides evidence of the extensive use of slaves on a southern industrial site.

DESCRIPTION

Structures at the Tannehill State Park associated with the original iron plantation and the Civil War furnace operations are concentrated in the western portion of the park along Roupes Creek and accessed by the original tramway roadbed. These structures include three stone furnaces with blower house and raceway, slave housing and cemetery, a sandstone quarry, charcoal pits and extensive foundations of other structures including forges, foundries, brick-making, tanning, and office buildings.

In addition to these historic resources, the Tannehill State Historical Park includes 34 historic buildings that have been moved to the site, and new construction including The Iron and Steel Museum, the Little Southern Railway depot and tracks, recreational grounds for camping, picnicking, hiking, horseback riding, and scouting, and park-related structures.

The primary use area of the park is located just south of the entrance. New construction and historic structures moved to the park are grouped here and in clusters along Mill Creek with sites tied together by new trail and rail networks.

ORIGINAL HISTORIC STRUCTURES AND SITES WITHIN THE PARK

1. Furnace No. 1

Constructed by Moses Stroup c. 1859, this 30' high cold blast furnace represents the technology of hillside furnaces that employed gravity to feed ore and charcoal. Its capacity was from three to five tons per day. Active throughout the Civil War, the stone furnace was not refired after Union troops raided the site in 1865. Extensive restoration work (including reconstruction of the wooden charging bridge and cast shed) was undertaken in 1976 and the furnace successfully refired.

Other operations under the Stroup management included tramways to the brown ore mines, charcoal pits and quarry operations as well as a nail factory, various small blacksmith and foundry operations, a tan yard and a brick kiln. Products were shipped to market over the Bucksville and Montevallo Roads. The railhead of the Alabama and Tennessee Rivers Railroad, located near Montevallo by 1853, extended markets for Tannehill iron to Selma, Montgomery and other southern cities. By 1861, several area planters also operated forges just to the east of the Tannehill Furnace site along Roupes Creek. The Williams and Owen Forge, constructed by Thomas C. Bratton, was active from 1861 to 1866. William Cowens also operated a forge. In addition to the furnace, the original tramways and road system remain. To date,

archaeological excavations have located only the site of a brick kiln.

2. Blower House, with forebay and raceway

The diversion of water from Roupes Creek to power iron working began with Daniel Hillman's forge in 1830. The existing stone-lined forebay and raceway replaced Hillman's earlier flumes, possibly as early as 1842. The blower house with waterwheels may have been installed when Stroup built Tannehill Furnace No. 1 in c. 1859. Its purpose was to blow a blast of cold air into the base of a forge or furnace. The current wooden blower house was reconstructed in 1990 on the 18' x 8' stone foundations of an original structure. Two waterwheels of the period have been installed in this structure to facilitate interpretation. During the Civil War, steam-powered blowers replaced the original water wheels.

3. Furnaces No. 2 and No. 3, the "Double Furnaces"

Constructed in 1863 with advances from the Confederate government, these 30 foot stone furnaces were equipped with a steam engine to provide hot blast and thus increase the yield of iron. When Union troops arrived to destroy the furnaces on March 31, 1865, the "Double Furnaces" were in blast. Iron from the last run remains in both furnaces.

4. Quarry Site

Sandstone blocks weighing as much as 400 pounds, for furnace and raceway construction, were quarried from this hillside site 300 yards to the west of the furnaces. Drill holes are clearly visible along the tramways, now hiking trails, leading to the furnaces.

5. Slave House Ruins

Located across Roupes Creek to the east of the furnace site are foundations and chimneys ruins at sites said to be slave houses. To a trained observer ruins of 20 structures are visible. No archaeological work has yet been done at the site. Ethel Armes stated that 600 slaves worked at Tannehill during the Civil War in all phases of ironmaking including timber cutting, charcoal production, ore mining, construction and transportation.

6. Slave Cemetery

Located across Roupes Creek to the east of the furnace site on the "iron haul" road to Montevallo, this cemetery includes 40 to 50 grave sites that are easily identifiable. Oral tradition holds that slaves were buried here. No extensive research or archaeological work has been done at this site nor has the full extent of the site been determined due to overgrowth.

7. Hillman Forge Ruins Site

Archaeological evidence is inconclusive as to the location of this 1830 forge site. Foundations and artifacts from a storage shed built previous to the construction of Furnace No. 1 were identified through the 1990 archaeological investigation, but not conclusively tied to this early forge. A wooden superstructure was rebuilt to cover these foundations located just east of the Blower House.

ORIGINAL HISTORIC STRUCTURES LOCATED ON ACCESS ROADS TO THE TANNEHILL STATE PARK

Entering from I 65/20 through Bucksville:

1. David Buck House (1825)

Old Tuscaloosa Highway, Bucksville

2. Bucksville Cemetery

Daniel Hillman, Ninion Tannehill, John Wesley Hall and many other of the early ironworkers and planters of the area are buried here.

3. Goethite and Other Brown Ore Mine Sites (active 1830s-1950s)

This rich deposit of brown ore was continuously mined for more than a century. Hillman may have opened mining in the 1830s. David Thomas, Pennsylvania's leading ironmaster, purchased the Tannehill site in the 1860s to acquire these deposits which his company (later the Pioneer Mining and Manufacturing Company and Republic Iron and Steel) used to fuel their furnaces at Thomas, Alabama. The Shook and Fletcher Company also actively mined these deposits until the 1950s.

By casual observation, hand dug depressions, trenches, tramways and former mining sites--now lakes--are still visible about the vast 800+ acre former mining tract.

Entering along Eastern Valley Road from I 459 and Bessemer:

1. Owen House (1833-38)

Eastern Valley Road one mile west of I 459

2. McAdory House (1840)

214 Eastern Valley Road, one mile west of 14th Street, AL 150;
four miles east of I 459

3. Sadler House (c. 1838)

Eastern Valley Road, six miles west of AL 150, one mile west of McAdory High School and intersection with I 459

Entering from the Brierfield Ironworks along the old Iron Haul Road to the Alabama and Tennessee Rivers Railroad, an abandoned right of way currently proposed as a recreational trail linking Tannehill and Brierfield:

1. Williams and Owens Forge Archaeological Ruins (1861-1866)
Roupes Creek, just east of the Tannehill Furnaces
2. Alabama Coal Mining Company Mine Ruins (1859)
Near Aldrich

This mine, the earliest, capital-intensive shaft coal mine in the state, produced throughout the Civil War period. Foundations of the steam engine hoist and of many other structures remain.

3. Thompson's Mill-Valley Forge Ruins (1820s-1860s)
Near Montevallo

Planter Edmund King financed construction of this, the earliest known forge in the District

4. Brierfield Ironworks Ruins (1861-1880s)
Brierfield (now a part of Tannehill) State Historical Park,
Brierfield

This Civil War ironworks produced and rolled iron for Confederate armament and was refired and rebuilt during Reconstruction.

HISTORIC STRUCTURES MOVED TO PARK

1. Ash House (n.d.)
from St. Clair County
2. Bagley House-now Sweet Shop (1850)
from near Pinson, Jefferson County
3. Belcher House (1870)
from Bibb County
4. Bell Farm Barn (1930)
from near McCalla, Jefferson County
5. Bolling Farm Dairy Barn-Milk House (1822)
from near Maplesville, Chilton County
6. Cane Creek School (1923)
from near Warrior, Jefferson County

7. Carlisle Farm Kitchen Outbuilding-now Restrooms (1890)
from near Sprott, Perry County
8. Carlisle Farm Corn Crib (1835)
from near Sprott, Perry County
9. Collins House (1870)
from Lamar County
10. Crocker Cabin (1884)
from Jefferson County
11. Dunkin House (1871)
from Perry County
12. Fowler House School (1860)
from near West Blocton, Bibb County
13. Hogan House (1834)
from Bibb County
14. Hosmer House-now Concession Building (1911)
from Tuscaloosa County
15. Kimbrell Methodist Church (1905)
from Jefferson County
16. Marchant House (1871)
from Tuscaloosa County
17. May Plantation Cotton Gin (1858)
from near Knoxville, Greene County
18. Nail House (1860)
from Jefferson County
19. Nelson House (n.d.)
20. Old Peanut House-Country Store (1890)
from near Sprott, Perry County
21. Park Office (1895)
22. Peel House (1890)
from Shelby County
23. Snead House (1840)
from Bibb County

24. Stamps Cabin (1870)
from Perry County
25. Stewart, Wendell House (1855)
from Bibb County
26. Stewart House (1877)
from Bibb County
27. Stewart Farm Smoke House (1870s)
from Bibb County
28. Stewart Farm Barn (1870s)
from Bibb County
29. Stewart Farm Gun and Blacksmith Shop (1870s)
from Bibb County
30. Tapawingo Iron Truss Bridge (1902)
formerly spanned Turkey Creek near Pinson, Jefferson County
31. Thompson House Workshop (1835)
from Bibb County
32. Williams House (1889)
from Bibb County
33. Woodward Iron Company Post Office (1914)
from Woodward, Jefferson County
34. Young's Store (1905)
from Harrisburgh, Bibb County

NEW CONSTRUCTION

Bicentennial Wagon Shed
Campers' Bathhouse
Cannon Shed at Museum
Farley Field Bathhouse 2
Furnace Master's Inn Restaurant (1976)
Gate House
Indian Council House (1989)
(Reconstruction)
Information Center
Iron and Steel Museum (1981)
Manager's Dwelling
Museum Display Shed (1990)
New Kiwanis Shelter
New Campers' Bathhouse

Picnic Shelters 1, 2, 3, & 4
Public Restrooms
Riding Stable/Barn
Storage Building
Train Depot Sheds 1 & 2

THE LITTLE SOUTHERN RAILROAD DEPOT AND TRACKS

An excursion train leads park visitors from the Little Southern Railroad depot to the Pioneer and Deer Farms.

IRON AND STEEL MUSEUM OF ALABAMA

A major attraction found on the Tannehill Park site is the Iron and Steel Museum of Alabama. It is located in the western portion of the park property to the south of the main entrance. The Museum contains the South's largest collection of ironworks artifacts. In addition, it houses old machines, Civil War items, buggies, coaches, farm equipment, as well as books and over 1,000 iron trade journals, some dating to the late 1800s. Exhibits and photographs in the museum trace the history of the area from the time of the Creek Indians, who used the iron they found there for arrowheads, to the day the Union troops arrived at Tannehill.

TRAIL SYSTEMS

Hiking Trails

Through its network of hiking trails, the Tannehill Historical State Park unites historical and recreational experiences. The seven developed trails follow the existing roadways actually used at the Tannehill Ironworks for its many mining, charcoal-making and shipping activities. The "Furnace Trail" begins at the park entrance and leads to the ironworks, the Blower House and to Hillman Forge along Roupes Creek. Hundreds of bushels of charcoal were hauled down the "Tanyard Trail" to fuel the furnaces. The "Slave Quarters Trail" is the main road down which Union troops attacked the Tannehill Ironworks on March 31, 1865; numerous slave cabins were burned during the raid along this route. Tannehill iron ingots were shipped by ox cart 18 miles down the "iron road" to the railroad at Montevallo; the slave cemetery located near the trail contains 350-400 graves. Finally, the "Tramway Trail" is the route of the old 1850 tramway down which mules pulled ox carts on wooden rails between the ore mines two miles distant and the Tannehill ironworks. The site of Tannehill's first grist mill, constructed in 1840s, which was burned by Federal troops, is located along this trail.

Horseback Riding Trails

Horseback trail rides are available throughout Tannehill.

RECREATION GROUNDS

The primary picnic area is located south of the entrance to Tannehill in the heart of the developed area.

Camping sites are provided adjacent to the picnic area, as well as along the Little Southern Railroad tracks. Future camping has been planned south of Mill Creek between Bubbling Springs located on the west and the Slave Quarters site located on the east. Bath house facilities are conveniently located near both the picnic and the camping areas.

The Boy Scout field is situated on the eastern edge of the park to the northeast of Mill Creek.

HISTORICAL OVERVIEW

In the fall of 1830, "several planters of means" in Jefferson County decided to experiment with iron manufacture. The Jefferson County residents recruited Daniel Hillman, a seasoned forge builder whose Dutch ancestors had been ironmasters for centuries. The elderly Hillman built a forge on the banks of then heavily-timbered Roupes Creek and located a large deposit of brown ore (later called the Thomas and Goethite Mines). Writing to his son, Daniel Hillman described the ironmaking potential of the area as "one of the best prospects I ever saw ...to make a fortune." Hillman's intended market was Tuscaloosa.

After Hillman's death in 1832, Ninion Tannehill, a South Carolina-born cotton planter and stock breeder, bought the forge and expanded operations. Known as "Tannehill," the operation developed as a small iron plantation producing plows, skillets, kettles, irons and other cast-iron goods sold throughout the agricultural areas of the state. Some 20 slaves assisted with agricultural and industrial pursuits on the 1,000 acre farm, 750 acres of which were cleared for cotton farming and livestock by 1842. Tannehill operated gin, grist and saw mills, and maintained "houses for hands" and a two story frame residence for his family. At the forge site, 15 acres were cleared and "some good buildings for hands" erected. With the 1857 sale of the furnaces to ironmaster Moses Stroup, operations increased significantly. Using slave labor, Stroup quarried sandstone and constructed a 30' furnace with charging bridge and cast shed. He also built a tramway to the brown ore mines before selling the furnace to William Sanders.

With the advent of the Civil War, the Confederate Government granted Sanders a large contract to construct two additional furnaces (the "double furnaces"). With three furnaces in blast, Tannehill became a major Alabama ironworks with daily output of 20 tons. Iron was hauled from the furnaces 16 miles to the Alabama & Tennessee Rivers railhead near Montevallo for shipment to the Arsenal at Selma. Holloware was also cast during the war. On March 31, 1865, federal troops destroyed the furnaces while in blast. It is presumed they also destroyed all documentation then extant at the site.

In 1869, David Thomas, a major Pennsylvania industrialist, who formed the Pioneer Mining and Manufacturing Company (later acquired by Republic Steel), purchased the Tannehill property as part of his acquisition of mineral lands. The Pioneer Company initiated brown ore mining in this area in the late 1880s but never refired the Tannehill Furnaces, choosing instead to locate their industrial operations at Thomas. In 1952, Republic donated the furnace site to the University of Alabama. Development of the state historic park began in 1969.

CONDITION

Three reconstructed furnaces, raceway and undisturbed archaeological remains of slave housing and cemetery remain. The ruins of the three historic furnaces, a blower house, and cast shed have been reconstructed during various periods since the late 1970s. Stonework of the furnaces, forebay and raceway, and foundations of several additional structures were quarried on and are original to the site. All wooden superstructures are new construction. The waterwheels have been relocated to the site. The slave cemetery and slave quarters have not been investigated. A Master Plan for the overall Tannehill Historic State Park is in the works.

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